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FOR

DATA NETWORKING SYSTEM AND METHOD FOR INTERFACING A USER

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DATA NETWORKING SYSTEM AND METHOD FOR INTERFACING A USER

RELATED APPLICATION(S)

The present application is a continuation-in-part of prior US application 10/254,410 filed September 24, 2002, which claims priority from US provisional application 60/324,941, filed September 24, 2001.

FIELD AND BACKGROUND OF THE INVENTION

The present invention relates to networking, and more particularly to data networking interfaces.

DISCLOSURE OF THE INVENTION

An interface is provided for data networking. Included is a network browser window associated with a network browser for displaying content associated with uniform resource locators (URLs) during network browsing. Also displayed is a plurality of identifiers adjacent to or separate from the window in which the content is displayed. In use, a user is allowed to pre-select at least one of the identifiers. Moreover, after the pre-selection, content associated with at least one URL displayed during use of the network browser is correlated with the pre-selected identifier.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure **1** illustrates a network architecture, in accordance with one embodiment.

Figure **2** shows a representative hardware environment that may be associated with the various network components of Figure **1**, in accordance with one embodiment.

Figure **3** illustrates a method for collecting competing activity documentation.

Figure **4** illustrates an exemplary graphical user interface for collecting competing activity documentation from the Internet utilizing a network browser application, in accordance with one embodiment.

DETAILED DESCRIPTION

The following description is the best embodiment presently contemplated for carrying out the present invention. This description is made for the purpose of illustrating the general principles of the present invention and is not meant to limit the inventive concepts claimed herein.

Figure **1** illustrates a network architecture **100**, in accordance with one embodiment. As shown, a plurality of networks **102** are provided including a first network **104** and a second network **106**. Also included is at least one gateway **107** coupled between the networks **102** and a third network **108**. In the context of the present network architecture **100,** the networks **104, 106, 108** may each take any form including, but not limited to a local area network (LAN), a wide area network (WAN) such as the Internet, a wireless network, etc. Further, any number of networks may be included.

In use, the gateway **107** serves as an entrance point from the networks **102** to the third network **108.** As such, the gateway **107** may function as a router, which is capable of directing a given packet of data that arrives at the gateway **107**, and a switch, which furnishes the actual path in and out of the gateway **107** for a given packet.

Further included is at least one server **114** coupled to the third network **108**, and which is accessible from the networks **102** via the gateway **107**. It should be noted that the server(s) **114** may include any type of computing device/groupware. Coupled to each server **114** is a plurality of user devices **116**. Such user devices **116** may include a desktop computer, lap-top computer, hand-held computer, printer or any other type of

logic. It should be noted that a user device **117** may also be directly coupled to any of the networks, in one embodiment.

For reasons that will soon become apparent, the user devices **116** and/or server(s) **114** may be equipped with databases **120**, i.e., collections of data. Such databases may include information on intellectual property. For example, the databases **120** may include a plurality of intellectual property identifiers which each identify a specific piece of intellectual property. In the context of the present description, intellectual property refers to any patent, patent application, invention disclosure, trademark, copyright, trade secret, or any other granted or potential right in an intangible entity. In the case of patents, patent applications, and invention disclosures, the aforementioned identifier may include a patent number, patent application serial number, issue date, filing date, docket number, and/or any other information which identifies and/or is associated with the intellectual property.

Moreover, the intellectual property identifiers in the databases **120** may be owned by a particular company or other entity in the form of a docketing database or the like. In the alternative, the databases **120** may be a comprehensive set of intellectual property identifiers which are currently granted, published, and/or otherwise received by a governmental authority, i.e. United States Patent Office.

In addition, servers coupled to remote networks **104**, **106** and/or the third network **108** may also have access to competing activity documentation such as online information, product information, advertising and promotional materials, etc.

Figure **2** shows a representative hardware environment that may be associated with the various network components of Figure **1**, in accordance with one embodiment. Such figure illustrates a typical hardware configuration of a workstation in accordance

with a preferred embodiment having a central processing unit **210**, such as a microprocessor, and a number of other units interconnected via a system bus **212**.

The workstation shown in Figure **2** includes a Random Access Memory (RAM) **214**, Read Only Memory (ROM) **216**, an I/O adapter **218** for connecting peripheral devices such as disk storage units **220** to the bus **212**, a user interface adapter **222** for connecting a keyboard **224**, a mouse **226**, a speaker **228**, a microphone **232**, and/or other user interface devices such as a touch screen and a digital camera (not shown) to the bus **212**, communication adapter **234** for connecting the workstation to a communication network **235** (e.g., a data processing network) and a display adapter **236** for connecting the bus **212** to a display device **238**.

The workstation may have resident thereon an operating system such as the Microsoft Windows NT or Windows/95 Operating System (OS), the IBM OS/2 operating system, the MAC OS, or UNIX operating system. It will be appreciated that a preferred embodiment may also be implemented on platforms and operating systems other than those mentioned. A preferred embodiment may be written using JAVA, C, and/or C++ language, or other programming languages, along with an object oriented programming methodology. Object oriented programming (OOP) has become increasingly used to develop complex applications.

Figure **3** illustrates one possible method **300** for collecting competing activity documentation. Such process begins in operation **302**, by executing a network browser application for browsing a network utilizing a processor coupled to the memory (see Figure **2**). Such network browser application may include, but is not limited to MICROSOFT INTERNET EXPLORER, NETSCAPE NAVIGATOR, or any other application capable of allowing browsing of a network such as the Internet.

During use, in operation **304**, uniform resource locators (URLs) to data sites/files describing a plurality of competing activities are selected utilizing the network browser application. It should be noted that such selection process may be accomplished in any desired manner, such as simply browsing the particular URL.

Once the URL has been selected, an input window may be displayed utilizing the network browser application for allowing the selection of one of the intellectual property identifiers. See operation **306**. Such selection may include manual entry of one of the intellectual property identifiers, or the selection thereof via a list. More information on one exemplary embodiment of such window will be set forth in greater detail during reference to Figure **7**. In an alternate embodiment, the appropriate intellectual property identifier(s) may be identified in a window separate from the network browser application, such that any competing activity documentation selected during use of the network browser application results in automatic correlation with the pre-selected intellectual property identifier(s).

The documentation related to the selected URLs is then stored in the memory, as set forth in operation **308**. Such documentation can include web pages, articles, spreadsheets, slide shows, compressed documents such as files in Portable Document Format (.pdf), etc. and can even include multimedia files and streaming multimedia. Still yet, in operation **310**, the documentation related to the selected URLs may be archived for later use. This feature is critical for storing evidence of such competing activity, as content of URLs are often subject to change.

Preferably, the URL or pointer information is stored with the documentation. Also preferably, the date is also saved with the documentation to show when the documentation was discovered. The date is ideally retrieved from an independent site, such as from the National Institute of Standards and Technology site

(http://nist.time.gov/timezone.cgi?Pacific/d/-8/java), so that the date is virtually indisputable.

Next, in operation **312,** the selected intellectual property identifiers are correlated with the URLs utilizing the processor coupled to the memory (see Figure **2**).

Figure **4** illustrates an exemplary graphical user interface **400** for collecting competing activity documentation from the Internet utilizing a network browser application, in accordance with one embodiment. While the graphical user interface **400** described herein is designed for the purpose of collecting such Internet-based competing activity documentation; it should be noted that any other designs may be utilized per the desires of the user.

As shown in Figure **4**, a user may select or enter a URL using a URL field **402**, in combination with a plurality of controls **404**. A page or data associated with the URL is displayed on the browser, upon which a pop-up window **406** may be displayed on the network browser. It should be understood that the pop-up window **406** may be displayed in response to a certain mouse click (i.e. right mouse click), a keyboard command, or any other prompting mechanism. In the alternative, the pop-up window **406** may continuously be displayed when utilizing the network browser in a data collection mode.

In one embodiment, the pop-up window **406** may include a plurality of technology categories which may be selected for correlation with the present competing activity documentation. As an option, selection of the technology categories may prompt a sub-window **408** to be displayed showing a plurality of intellectual property identifiers previously correlated with the selected technology category. By this design, a

specific technology category or intellectual property identifier may be selected with a cursor **410** in order to correlate the competing activity documentation therewith.

Note that the documentation stored may be just the content item positioned under the cursor and/or the entire page.

In an alternate embodiment, a similar pop-up window **406a** may be used which delineates both technology categories and intellectual property identifiers on a single window for selection purposes.

In another alternate embodiment, the competing activity documentation (or the pointer to it) may be dragged and dropped into a "bucket" upon which it is stored as set forth above. See optional buckets **414** in Figure **4**. Further, a bucket may be provided for each technology group and/or intellectual property identifier. In the latter case, the individual bucket may be accessed by a series of submenus, such as the submenus **406**, **408** described above. As an option, the various buckets may be selected (i.e. clicked) for identifying further information about the associated technology group and/or intellectual property identifier to facilitate the search and collection of competing activity.

Still yet, a claim of a particular IP asset associated with a user's search may be selectively displayed in a separate window **412** or some other manner that allows the user to inspect the claim during the search for competing activity. This window **412** may share the screen with the network browser or be placed thereover.

In any case, once selected, a URL and any associated text, links, pictures, other content, etc. may be stored for correlation with the appropriate technology categories

and intellectual property identifiers. Such correlation may then be reported later, as will soon become apparent.

It should be noted that the collection of the foregoing intelligence may be a manual process which may be enhanced by the foregoing techniques. Of course, automatic "mining" techniques may be employed to automatically collect information on a periodic basis, or on a user-defined timeline. In any case, it is desired to update the information in the database on a continuous basis, i.e., in real time as data is received or daily, bi-weekly, etc.

While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not limitation. For example, any of the network components may employ any of the desired functionality set forth hereinabove. Thus, the breadth and scope of a preferred embodiment should not be limited by any of the above-described exemplary embodiments, but should be defined only in accordance with the following claims and their equivalents.